AUTOMATIC TRANSMISSION REMOTE STARTER AND FULL ALARM SYSTEM

Installation Guide

W A R N I N G !

This is a generic installation guide and it is designed for the specific model number stated above. Furthermore, for clarity purposes, the **START/STOP** button, associated with 4-button models, will be referred to as either **START** or **STOP** depending on the functionality being described.

Notice

The manufacturer will accept no responsibility for any electrical damage resulting from improper installation of the product, be that either damage to the vehicle itself or to the Unit. This Unit must be installed by a certified technician using all safety devices supplied. Please note that this guide has been written for properly trained Autostart technicians, a certain level of skill and knowledge is therefore assumed. Please review the Installation Guide carefully before beginning any work.

Warning

This unit is designed for vehicles with an **automatic** Transmission only. Before installing the Unit, test that the vehicle will not start if the gear select lever is in the "Drive" position. If the vehicle starts in gear, install a manual-transmission Car Starter instead.

DOC.:1.00 –CA– October 27, 2004 Manufactured in Canada by Autostart

Table of Contents

Introduction 2
Included in the Package 2
Before You Get *Started*.. 3
Harness Description 4
6-Pin Main Ignition Harness 4
5-Pin Secondary Harness 5
12-Pin Accessories Harness 5
2-Pin Harness 8
Flashing the Hood Pin 8
What is **Flashing** the Hood Pin? 8
The Programming Assistance Button (A.k.a. PAB.) 9
How to Program the Transmitter. 9
How to Enter Options Programming Mode 9
Horn Honk / Siren Timing (Optional) 11
Auto Tach Programming Procedure 11
Multi-Speed Tach Programming 12
Tach Adjustments 12
Testing 12
Closing Up 13
Supplementary Information 14
Fifth Relay Output (2nd IGN or 2nd ACC or 2nd START) 14
Ignition-Controlled Door Locks 14
Secure Lock 14
Turbo Mode 15
Safe Start (Child Safety Mode) 15
Siren or Horn Chirps 15
Vehicle Type – Gas or Diesel 15
Passive Or Active Arming 15
Disarmed Notification 16
Two-Stage Disarm 16
Shock Sense Bypass 16
Resetting The Module 16
Events Logging 16
Events playback 16
Start Failure Codes via Parking Lights 17
Intrusion Codes 17
Intrusion Codes via LED light 17
Chirps 17
Diagnostics - Parking Lights Flash Rate 18

Introduction

This Guide contains all information pertinent to the installation. Most (if not all) features are grouped in the User Guide and therefore, should you need information on a feature, you should refer to the User Guide

Included in the Package

Please review the installation guide before beginning the installation, particularly the wiring schematic and the programming options. it is very important that you familiarize yourself with the programming and the operation of the system, even if you have already installed a similar system in the past. There are many great features that may be overlooked if the manual is not read; this would prevent you from maximizing the potential of the module. Prior to the installation, make sure that all the hardware components required to install the system are in the box.

The following is a list of components included in the kit:

- 1 – Control Unit
- 1 – Plug-in dual-zone Shock Sensor
- 1 – Plug-in Push-button Valet Switch
- 1 – High-power 120-dB 6-tone Siren
- 1 – six-pin 14 AWG Harness (Ignition Harness)
- 1 – five-pin 18 AWG Harness (Main Harness)
- 1– twelve-pin 22 AWG Harness (Accessories Harness)
- 1– two-pin 22 AWG Harness (Accessories Harness)
- 1– five-pin Harness (Data Port Harness)
- 1– Parts bag: a Hood Pin-switch, a connector, wires and a warning label
- 1– User Guide.

INDUSTRY CANADA USER NOTICE (Canada):
Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (EIRP) is not more than that required for successful communication".

FCC USER NOTICE (U.S.A.):
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

Before You Get *Started*...

♦ On vehicles with a manual Transmission, **always** ensure that all Doors will get the Unit out of Ready Mode. Switch the wire used so that it is triggered by all Doors.

♦ Make sure that the Parking Brake and Door Switch contacts work properly.

♦ When working on a vehicle, always leave a window open.

♦ **Never** leave the keys in the car. Leave them on a workbench with a window rolled down.

♦ Remove courtesy light fuse, if possible, to prevent battery drain.

♦ **The Programming Assistance Button (A.k.a. PAB.)**
The PAB is mounted on the side of the Unit. This push button mimics the Hood-Pin switch in order to avoid having to get out of the vehicle and pressing the Hood-Pin switch. **The PAB will work only when the Hood is up.**

♦ Inspect vehicle for any body damage or electrical problems

♦ **Always solder and tape all connections.**

♦ Keep the Transceiver away from other types of antennas (GPS/Onstar).

♦ Never install the control unit where it could interfere with normal operation or obstruct service technicians.

♦ Always use a grommet when running wires into the Engine compartment. Never run wires through bare or sharp metal.

♦ Do not disconnect the battery on vehicles equipped with air bags and anti-theft radios.

♦ Never ground the control unit to the vehicle's steering column.

♦ Make sure that all the switches and controls operate properly.

♦ Verify that the vehicle starts and idles properly.

♦ Make sure that all safety equipment is installed: the Valet Button, the Hood Switch and the warning label

♦ When wiring in parallel, make sure to isolate each connection with a diode in order to avoid feedback and possible damage.

Examples:

Wiring a clutch bypass and a Transponder Module to the Ground Out when Running wire: At the junction point, where Ground Out when running "splits" and goes to each device, a diode is inserted on each of those lines.

Multiple or Separate Door pin Connections: When joining all door pins together to the Door pin input wire of the Module, each wire must be isolated with a diode to prevent feedback.

N.B.: The above examples reflect common situations where diodes are use to isolate. Please note that there are numerous other scenarios where diode isolation is required.

♦ Always make sure that any external relays or modules added to the Remote Starter Module are properly fused, and diode isolated.

♦ When testing the Shock Sensor, never test on glass with an opened hand, and never hit glass hard enough as to break it. When testing on Metal or plastic, make sure the testing does not result in damage to the

vehicle (i.e.: dents, broken glass, damaged trims, etc.).

♦ Vehicles equipped with daytime running lights may not allow the installer to view certain programming results since the daytime running lights do no go out (**Note:** The Parking Light output relay in the Module gives two "*clicks*" per flash, 1 *click* for ON and 1 *click* for OFF).

♦ Parking Light flashes referred to in this manual refer to the Parking Light output of the Module and not that of the vehicle.

Harness Description

When connecting the Module, it is important to make sure the connector with the Ground wire is connected first before making the 12-volt connections. Should the unit be powered before being grounded, there could be serious damage to internal components of the unit. **Be careful not to power up a Module before it is properly grounded.** To avoid any accident, it is a recommended to pull out the fuses from their sockets before the installation, and to put them back during the very last steps.

6-Pin Main Ignition Harness

Wire		Description
A	**RED +12 V Battery**	Connect to the largest 12 V supply wire at the Ignition harness. Ensure that the OEM power wire is fused for more than 30 A. **NOTE:** certain new vehicles have no suitable 12 volts source at the **IGNITION** switch (the 12 Volt wire is too small to supply the necessary current). In this case, the fuse box, or the B+ connection on the battery is recommended.
B	**PURPLE (+) 30 A starter output**	Connect to the Starter wire of the vehicle (at the **IGNITION** switch). The source wire should have +12 V with the Ignition Key in the **CRANK** position only.
C	**RED (+) 12 V Battery**	Connect to the largest 12 V supply wire at the Ignition harness. Ensure that the OEM power wire is fused for more than 30 A. **NOTE:** certain new vehicles have no suitable 12 volts source at the **IGNITION** switch (the 12 Volt wire is too small to supply the necessary current). In this case, the fuse box, or the B+ connection on the battery is recommended.
D	**YELLOW (+) 30 A ignition output**	Connect to Ignition wire of the vehicle. The source wire should have +12 V with the Ignition Key in the **IGNITION ON** (**RUN**) and **CRANK** positions. **Warning:** some vehicles have more than one **IGN** wire at the **IGNITION** switch for powering the heater blower motor. Use the 5th relay (pin F) and extra relays to power up any extra **IGN**. wires if necessary. **DO NOT JUMP WIRES** at the **IGNITION** switch, this will compromise the OEM electrical system.
E	**ORANGE (+) 30 A Accessories output**	This wire is for powering the heater blower motor. It is usually classed as an **ACC.** (no power in the **CRANK** position.) if it tests as an **IGNITION** (power in the crank pos.) then power it as an **IGNITION** (5th relay, or extra fuse). **Warning:** some vehicles have more than one **ACC** wire at the **IGNITION** switch for powering the heater blower motor. Use the 5th relay (pin F) and extra relays to power up any extra **ACC**. wires if necessary. **DO NOT JUMP WIRES** at the **IGNITION** switch, this will compromise the OEM electrical system.
F	**GREEN (+) 30 A 5th relay output**	This high-current output can be used to power a **2nd IGNITION** or a **2nd ACCESSORY** or a **2nd STARTER WIRE**. See jumper settings on page 14 for correct output. Additional **IGNITIONS, ACCESSORIES**, or **STARTER WIRES** must use external

		relays. **DO NOT JUMP WIRES** at the **IGNITION** switch, this will compromise the OEM electrical system.

5-Pin Secondary Harness

Wire		Description
1	**BLACK (–) Chassis ground input**	This wire must be connected to bare, unpainted metal (the Chassis or true Body ground). It is preferable to use a factory ground bolt rather than a self-tapping screw. **Screws tend to get loose or rusted over time and can cause erratic problems.**
2	**PURPLE (AC) Tachometer input**	This wire tells the Module if the Engine is running or not. It requires at least 1.8 volts (AC) and 1.5 Hz (or faster) at idle. Common Tach references are: the negative side of an injector, the negative side of an Ignition Coil, Camshaft sensor, Crankshaft sensor or the Engine Control Module (ECM). **NOTE:** A Tach signal that is too low will cause the Module to "over crank" and a Tach signal that is too high will cause the Module to "under crank".
3	**GRAY (-) Hood Switch input**	Connect this wire to the Hood Pin-switch supplied. This input will disable or shut down the Remote Starter when the Hood is opened. It is also used for programming and therefore it is essential that it is installed.
4	**ORANGE (+) Brake Switch input**	This wire must be connected to the Brake Light switch of the vehicle. The wire should be +12 V **only** while the Brake Pedal is pressed. This input will shut down the Remote Starter if the Brake Pedal is pressed. It is also used for programming and therefore it is essential that it is installed.
5	**YELLOW +12 V Parking Light output**	This wire provides a +12 V output (15 A max.) and must be connected to the Parking Light wire that tests +12 V when the Parking lights are **ON**. **Note:** Ensure that the voltage does not vary when the dimmer control switch is turned up or down. If this is the case, it is not the right wire. **There is also a negative Parking Light output. Only one of these two different outputs needs to be connected.**

12-Pin Accessories Harness

Wire		Description
1	**BLUE (–) AUX 3** (Trunk) **output**	500 mA negative output. This output can be used to control Trunk release (1-sec. pulse) or can be set to operate as a constant output as long as the **TRUNK** button is held pressed. (For Sunroof or Window close). **Note:** **AUX3** (**TRUNK**) operates only when Ignition is **OFF** or when the vehicle is running under remote control.
2	**BROWN (–) Lock output**	Programmable 500 mA, 1/10-sec., 7/10-sec. or 4-sec. negative output.
3	**GREEN (–) Unlock output**	Programmable 500 mA, 1/10-sec., 7/10-sec., 4-sec. or a double ¼-sec. pulse negative output.

4	**WHITE / BROWN (–) Arm output**	500 mA ground output when the **LOCK** button is pressed. This output is activated 500 ms before the **LOCK** pulse and deactivated 250 ms after the **LOCK** pulse ends. **Note:** The system will also give an **ARM**/**REARM** pulse on this wire when it shuts down the vehicle after a remote start.
5	**WHITE / GREEN (–) Disarm output**	500 mA ground output when the **UNLOCK** button is pressed. This wire is for disarming OEM Alarm systems. **Note:** System will also give a **DISARM** pulse before remote start.
6	**BLUE / WHITE (+) Positive Door input**	This input should be used in vehicles that use a **positive-switching** Dome Light circuit. Connect to a Dome Light wire testing +12 V with a Door open. **CAUTION!** You can only use a negative or a positive connection. In other words, only the **NEGATIVE DOOR INPUT** or the **POSITIVE DOOR INPUT** wire is connected. It is essential that the Module be connected in such a way as to allow **each one of the Doors** to turn off Ready Mode: **the driver-side Door Pin does not constitute by itself a sufficient connection**
7	**WHITE / ORANGE (–) Starter Kill output**	The unit is equipped with a selectable **passive-** or **active-arming Starter Kill** circuit that will immobilize the vehicle when the system is armed. This wire will provide a constant 500-mA negative output when the system is **armed** (locked by remote) or if remote started. This wire should be connected to a Single Pole Double-Throw Relay (This wire will connect to Pin 85, on the Relay, and Pin 86 will be connected to the Ignition wire). A second benefit of the Starter Kill is the Anti-Grind feature. When the vehicle has been remote started the Anti-Grind prevents the starter motor from re-engaging when the ignition key is inserted in the I**gnition switch** and accidentally turned to the **CRANK** position (The Starter Kill output becomes active during remote starts).
8	**ORANGE N/A**	N/A
9	**PURPLE (+) Siren or Horn output**	+12 V Siren output. Connect to the positive side of the Siren or the can be used for OEM Horn Honk control (a relay may be needed).
10	**WHITE (–) Ground out when running**	This is a 500-mA constant ground output that is active when the vehicle is running under a remote start. The output becomes active at the same time as the Ignition, and becomes inactive when the Module shuts down (i.e.: runtime has expired or the **STOP** button is pressed, etc.). The output can be used to activate external relays, bypass kits, etc. **CAUTION!** If multiple relays or modules are connected to the Ground Out wire, ensure that they are all diode isolated in order to avoid feedback and damaging the vehicle.

11	**GRAY (–) Negative Door input**	This input should be used in vehicles that use a **negative-switching** Dome Light circuit. Connect to a Dome Light wire testing ground with a Door open. **CAUTION!** You can only use a negative or a positive connection. In other words, only the **NEGATIVE DOOR INPUT** or the **POSITIVE DOOR INPUT** wire is connected. It is essential that the Module be connected in such a way as to allow **each one of the Doors** to turn off Ready Mode: **the driver-side Door Pin does not constitute by itself a sufficient connection.**
12	**YELLOW (+) Glow-plug Light input**	This positive input will monitor the Glow Plug Light in Diesel Mode: it will wait until the Glow Plug Light goes out to crank the Engine. Connect to the side of the Glow Plug Light that is positive when the Light is on. **Note**: In Diesel Mode there is a 18-sec. crank timing delay (or approximately 25-sec. if the run time is set to 30 min.): if the Glow Plug Light is still on after the delay expires, the Module will proceed to start the Engine. (Also known as the "wait-to-start light".) The purpose of the Glow-plug circuit on diesel vehicles is to pre-heat the Combustion Chamber before the vehicle is started. When a Remote Starter is installed on a diesel vehicle, the Glow- plug section of the Ignition circuit must be activated and allowed to operate before the vehicle is remote-started. For that purpose, the Glow-plug input wire of the Module must be connected to the Glow-plug indicator light of the vehicle. The Module will only accept positive Glow-plug input signals, if the signal is negative, use a relay to invert its polarity. A diode must be added between the negative Glow-plug trigger on the relay and the negative Glow-plug wire of the car. This is to prevent feedback effects on the Glow-plug indicator light on the instrument cluster: the light on the dash would come on because of the feedback, even though the circuit is off. **When the user remote-starts the vehicle:** • The Module will power up the Ignition circuit and wait to engage the Starter Motor while the Glow-plug indicator light is still on. • The Module will engage the Starter Motor as soon as the Glow-plug light (+) goes out. • Minimum waiting time is 3 seconds. • Maximum waiting time is 25 seconds (approx.). If no Glow-plug wire is found on the vehicle, the Glow-plug input on the Module may be "timed out". The Module will power up the Ignition and Glow-plug circuits and simply wait for the time-out before starting: • Connecting the Glow-plug input wire of the Module **to Ignition** will hold the ignition **ON** for the maximum waiting time of approximately 25 sec. (recommended). • Keeping the Glow-plug input wire of the Module **unconnected** will hold the ignition **ON** for the minimum waiting time (3 sec., not recommended in very cold environments). Connect the Glow-plug wire to the Ignition wire only after Tach has been programmed (i.e.: Connecting the Glow-plug wire is one of the very last steps in the installation process).

2-Pin Harness

Wire		Description
1	**BLUE / WHITE (-) AUX 2 output**	• 500 mA negative output. Can be programmed for one of the following options: • Constant while the **SHIFT** and then **LOCK** buttons are pressed, + 1 sec. after the buttons are released. • Pressing the **SHIFT** and then **LOCK** buttons will toggle the **AUX 2** output **ON** for a 30-second cycle and shuts off automatically unless the user presses **SHIFT** and then **LOCK** buttons before the end of that cycle, at which point, the **AUX2** output shuts off. • This output can also be used as Priority Door Unlock. Car Finder is enabled or disabled in the **AUX 2** function programming.
2	**YELLOW (-) Parking Light output**	• 500 mA negative Parking Light output **Note:** Ensure that the voltage does not vary when the dimmer control switch is turned up or down. If this is the case, it is not the right wire. **There is also a positive Parking Light output. Only one of these two different outputs needs to be connected.**

Flashing the Hood Pin

What is **Flashing** the Hood Pin?

It is a procedure that makes the Module go into the Programming Centre. Once the Module is in the Programming Centre, the Installer has no more than 20 seconds to get into one of the sub-menus. **Failure to do so will result in the Module exiting the Programming Centre and the Installer will have to *Flash the Hood Pin* once more.**

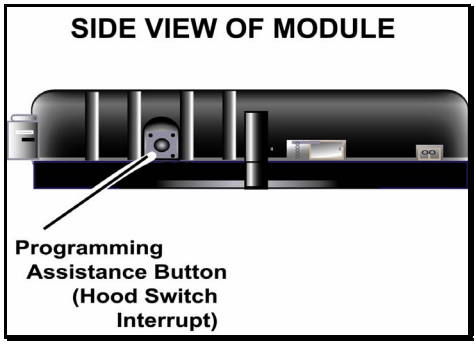
Remember: You can use the **Programming Assistance Button** instead of the Hood Pin any time the Hood is up.

The Installer …	The Module …
1- Press and hold the Hood pin for 4 seconds. 2- Let go of the Hood Pin. 3- While the Parking Lights are on, press down the Hood Pin once more. 4- Release the Hood Pin again --be careful not to over flash the Hood Pin as this will bring up the Events Playback and will not bring you the Programming Centre. 5- You have 20 secs to select one of the sub-menus.	**Parking Lights "ON"** **"ON" for 20 seconds**

Once inside the Programming Centre, the Installer has a selection of many different sub-menus. Once you are in the Programming Centre, you have the option of the following menus:

a) Transmitter Programming.....p.9
b) Options Programming.....p.9
c) Horn Honk/Siren Timing* (*if available).....p.11
d) Tach Programming.....p.11

Remember: Once the Parking Lights are on Solid, you have up to 20 seconds to select a sub-menu. Failure to do so will result in the Module exiting the Programming Centre and you will have to Flash the Hood Pin once more.



The Programming Assistance Button (A.k.a. PAB.)

The PAB is located on the side of the Module. This push button mimics the Hood-Pin switch in order to avoid having to get out of the vehicle and pressing the Hood-Pin switch. **The PAB will work only when the Hood is up.**

How to Program the Transmitter.

1. **FLASH** the Hood Pin Switch.

Before the 20 seconds have passed, turn the Ignition Key to the **IGNITION ON (RUN)** position.
Turn the IGNITION to OFF.

2. Press and hold the **LOCK** button until the vehicle gives 5 flashes. The Module has stored the Transmitter in its memory.
3. Close the Hood, to exit.

Table 1

The Module has the ability to retain up to 4 different Transmitter codes; if a fifth Transmitter is programmed, the code of the first Transmitter will be erased from memory. **To erase all Transmitter codes from memory, you must perform a Module reset (See "Resetting the Module" on page 16).**

To program the Transmitter on a second vehicle (Multi-car Operation), you must press the **TRUNK** button (of the secondary Transmitter you wish to program) during step 2 of transmitter programming.

How to Enter Options Programming Mode

The module is equipped with four custom programming modes that allow the installer to custom-fit the system outputs according to installation requirements. The programming options are designed to facilitate interfacing with all vehicle types. (See section **Table of Programming Options** later in this guide.). To enter the programming center, follow these procedures :

1. **Flash the hood pin switch (see page 8)**
– The parking lights will stay on for up to 20 seconds.
– Before the lights go out:
2. Press and hold the brake pedal and press one of the following buttons on the transmitter:
   - **LOCK** to access mode 1;
   - **UNLOCK** to access mode 2;
   - **TRUNK** to access mode 3;
   - **START/STOP** to access mode 4.

   The parking lights will flash and the horn will honk once (if configured), twice three times or four times to confirm entry into a mode.
3. Release the brake pedal.
4. To exit programming centre, simply close the hood.

Table 2

To get into the programming centre

Note: The unit will stay in the selected programming mode until the hood pin-switch or the brake pedal is pressed again. **Therefore take your time to make the proper selection.** Pressing the brake pedal will take you back to the programming centre, where you can select a different mode.

Once you access a particular programming mode, you will automatically start at function 1. Once you select one of the options of function 1, you will automatically be taken to the next function.
To select one of the five options of any given function, press the corresponding button on the transmitter:

- **LOCK** button .....to access option 1
- **UNLOCK** button .....to access option 2
- **TRUNK** button .....to access option 3
- **START** button .....to access option 4
- **SHIFT** then **LOCK** buttons .....to access option 5

Accessing options

In each function, once an option has been selected the parking lights will flash 1, 2, 3, 4 or 5 times (depending on the selected option). **Please note** that the different functions within any particular mode can only be accessed sequentially: the programming centre will move from function 1 to function 2, then to function 3, and so on. Therefore, whenever you access a particular mode, be prepared to re-configure all the functions of that mode in ascending order.

Multi-Level Features *(default state)*

Basic Features **(*press the SHIFT* button *1X)***

SHIFT	➢	LOCK:	aux 2
SHIFT	➢	START/STOP	cold weather

Multi-Car Operation **(*press the SHIFT* button *2X)***

SHIFT	➢	SHIFT	➢	LOCK:	2nd car lock
SHIFT	➢	SHIFT	➢	UNLOCK:	2nd car unlock
SHIFT	➢	SHIFT	➢	START/STOP:	2nd car start/stop
SHIFT	➢	SHIFT	➢	TRUNK:	2nd car trunk

Customized Features **(*press the SHIFT* button *3X)***

(*May not be applicable for certain vehicles*)

Your installer can add customized features such as turning on the radio, opening sliding doors, etc.

SHIFT	➢	SHIFT	➢	SHIFT	➢ LOCK:	customized feature 1
SHIFT	➢	SHIFT	➢	SHIFT	➢ UNLOCK:	customized feature 2
SHIFT	➢	SHIFT	➢	SHIFT	➢ TRUNK:	customized feature 3
SHIFT	➢	SHIFT	➢	SHIFT	➢ START/STOP:	customized feature 4

By default, the multi-level features are programmed as follows:

- Level 1 (Basic Features)
- Level 2 (Multi car operation)
- Level 3 (Customized Features)

- To access a feature that is programmed as level 1, press the **SHIFT** button once followed by the desired function.
- To access a feature that is programmed as level 2, press the **SHIFT** button twice followed by the desired function.
- To access a feature that is programmed as level 3, press the **SHIFT** button three times followed by the desired function.

Your installer can customize the system as to personalize these multi-level features in an order that best suits you; your options are:

Option 1:

Level 1 (requires pressing the **SHIFT** button 1X)	→	Multi car operation
Level 2 (requires pressing the **SHIFT** button 2X)	→	Basic features
Level 3 (requires pressing the **SHIFT** button 3X)	→	Customized features

	Option 2:	
Level 1 (requires pressing the **SHIFT** button 1X)	→	Basic features
Level 2 (requires pressing the **SHIFT** button 2X)	→	Multi car operation
Level 3 (requires pressing the **SHIFT** button 3X)	→	Customized features
	Option 3:	
Level 1 (requires pressing the **SHIFT** button 1X)	→	Customized features
Level 2 (requires pressing the **SHIFT** button 2X)	→	Multi car operation
Level 3 (requires pressing the **SHIFT** button 3X)	→	Basic features
	Option 4:	
Level 1 (requires pressing the **SHIFT** button 1X)	→	Basic features
Level 2 (requires pressing the **SHIFT** button 2X)	→	Customized features
Level 3 (requires pressing the **SHIFT** button 3X)	→	Multi car operation

Example: If the multi-level features were set to option 3, the setup would be as follows:

- Level 1 → Customized feature
- Level 2 → Multi car operation
- Level 3 → Basic features

The **"Basic features"** are now programmed as level 3 and therefore:

- To access the aux.2 feature, the user needs to press on the **SHIFT** button three (3) times followed by the **LOCK** button.
- To access the status request feature, the user needs to press on the **SHIFT** button three (3) times followed by the **TRUNK** button.
- To access cold weather mode, the user needs to press on the **SHIFT** button three (3) times followed by the **START/STOP** button.

Horn Honk / Siren Timing (Optional)

1. Make sure that **Mode 3 Function 4 Option1** or **Option 3** is activated.
2. **FLASH** the Hood Pin Switch

Before the 20 seconds have passed,

3. Press and hold the Brake Pedal.
   - Press the **START** and **UNLOCK** buttons simultaneously on the Transmitter.
   - The Horn/Siren will sound 5 times.
4. Release the Brake Pedal.
5. To change the timing:
   a. To increase the Horn Honk/Siren by 3 ms, press the **LOCK** button.
   b. To increase the Pulse by 10 ms, press the **START**
   c. To decrease the Pulse by 3 ms, press the **UNLOCK** button.
   d. To decrease the Pulse by 10 ms, press the **TRUNK** button.
6. To save the setting: press **LOCK** and **UNLOCK**. If 3 Honks/Chirps are heard the new value has been saved.

For each timing change, the Horn/Siren will sound with the new setting, except under the following circumstances:

- When the lower limit of 5 ms is reached, the Horn/Siren will sound for 1/4 second.
- When the upper limit of 200 ms is reached, the Horn/Siren will sound for 3/4 second.

A system reset will set the system back to the default: 30 ms
Close the Hood to cancel the changes.

Table 3

Auto Tach Programming Procedure

NOTE: If no tach has been programmed and the **start** button is pressed, there will be no start attempt and the vehicle will give 5 flashes. If another tach programming is required, simply repeat the auto tach programming procedures. The module stores the tach setting, being ***auto tach*** or conventional tach, until the module is reset.

This process can be carried out instead of the conventional tach programming procedure.

1. Make sure all the connections are done properly and that the module has been powered-up.

2. With the hood up (ground on the hood pin line), start the vehicle using the key.
3. Let the engine reach proper idle speed

The parking light output from the module is activated when the vehicle starts and it will shut off once the tach signal is detected.

4. Press and hold the brake pedal until the parking light output from the module flashes 5 times.
5. Turn the Ignition **OFF**. At this point, the tach setting has been programmed.

Table 4

Multi-Speed Tach Programming

No manual adjustments are necessary. However, you should go through the Tach programming procedure every time a new Unit is installed.

1. **FLASH** the hood pin switch.
2. Press and hold the Brake Pedal.
   - Press the **LOCK** and **UNLOCK** buttons simultaneously.
   - The parking lights will flash 4 times the horn/siren will sound 4 times *(if programmed).*
   - Release the brake pedal.
3. **Start the vehicle and let it to reach regular engine-idle speed.**
4. Once the vehicle is idling properly, press and hold the brake pedal until the parking lights flash five times, release the brake pedal: the tach signal is now programmed.
   - The Horn/Siren will sound 1, 2 or 3 times depending on the Tach mode which has been detected.

Table 5

Tach Adjustments

After having programmed the tach you might need to adjust it (increase or decrease the idle speed). In order to do so, you will need to follow these steps:

1- Flash the hood pin **(see page 8)**
2- Enter the programming centre.
3- Press **and hold** the brake pedal
4- Press simultaneously the **LOCK** and **UNLOCK** buttons.
5- With the brake pedal still pressed,
   a. Press **UNLOCK** to decrease the idle speed, or,
   b. Press **LOCK** to increase the idle speed.
6- Once you have obtained the desired idle speed, press **TRUNK** to save the new settings. The parking lights will flash five times. If the horn has been configured, you will hear one honk if the last button pressed was **LOCK**, and, two honks if the last button pressed was **UNLOCK**.
7- Release the brake pedal and close the hood.
8- The adjustment is done.

Table 6

Testing

Before putting back the vehicle together, it is recommended to check that the system operates properly. The following testing procedures should be used to verify proper installation and operation of the system. Before testing, make sure that all connections are soldered and that the unit is plugged in.

1. **Remote-start the Engine and listen for Starter drag.** If the Starter cranks for too long, carry out another Tach learning procedure.
2. **Test Hood Switch shutdown**: with the vehicle running under the Remote Starter, open the Hood; the vehicle should shut down. If it does not shut down, check the Hood Pin-switch and its connector.

3. **Test the Brake shutdown circuit**: With the vehicle running under the Remote Starter, press and release the Brake Pedal. The Engine should shut down immediately. If the Engine continues to run, check the Brake Switch connection.
4. **OEM Alarm Control:** Make sure the Module is able to arm and disarm the OEM Alarm (if applicable).
5. **Alarm Testing:** Arm the vehicle and test the Hood Pin and each Door to make sure that each one of these points triggers the Alarm.
6. **Door Locks, Auxiliary Outputs and Trunk Testing:** Make sure each of these options respond to the Transmitter (if they were installed).
7. **Shock sensors:**

- **Mounting Shock Sensor:** Mount the sensor in the most central location on the vehicle as to allow the sensor to detect vibration equally from each side of the vehicle. Two common places to mount the sensor are Wire harnesses or metal braces located under the Dashboard/Center Console.
- **Setting:** Turning the dial clockwise increases the sensor's sensitivity and turning the dial counter-clockwise decreases the sensor's sensitivity.
- **Testing:** Make sure the Hood and the Doors are closed. Arm the Alarm and wait approximately 10 seconds to let the vehicle "settle". A **light "tap"** on the vehicle should **NOT** trigger either the Alarm or the Warn Away. A **medium "tap"** should trigger the Warn Away. A **hard "tap"** should trigger the Alarm.
- All vehicles are different and therefore transmit shock level differently, if you are unable to set both zones to your satisfaction, referrer to the programming options to disable the appropriate zone(s).
- When the Engine is running after remote start **the Shock Sensor will not trigger an Alarm condition**, although it will still produce warning chirps if Warn-away is enabled.

8. **Two-Stage Disarm:** When the vehicle is in an alarm condition, pressing the **UNLOCK** button mutes the Siren, pressing the **UNLOCK** button a second time disarms the Module.
9. **Starter Kill option:** Sit inside the vehicle with all the Doors closed. Arm the vehicle and then try to start the vehicle with the key –it should not start. If the vehicle starts, rewire the starter kill so it functions properly.
10. **Valet Mode:** Make sure the Module is able to enter and exit Valet Mode properly. When setting the Module into Valet mode, the Starter Kill function is disabled, when pressing **LOCK** the Doors will lock but the Starter Kill will not be activated. (Refer to User Guide for more information on Valet Mode).
11. **Idle Mode:** Make sure the vehicle properly goes into Idle Mode.

Closing Up

Use tie-wraps or screws to properly secure the Module and keep the wiring away from any moving parts such as the Parking Brakes or Steering Column Shafts. Mount all switches in good and accessible locations where they do not risk getting kicked or hit accidentally. Any under hood wiring should be split loomed and tie strapped away from moving parts and heat sources.

Always make all your connections before plugging in the Module. Keep in mind to plug the fuses as **the last step before the initial powering of the Module**. Be sure to test all functions properly before closing up the installation.

Make sure the Warning Label is applied on a visible place under the Hood.

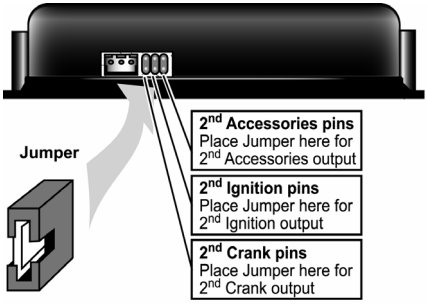
Most comebacks are the result of misunderstandings about how a product works or performs. Take the time to properly explain all functions and features to the customers before they leave the premises. Doing this will save time and money.

Supplementary Information

Fifth Relay Output (2nd IGN or 2nd ACC or 2nd START)

This Remote Starter is equipped with a high-current programmable 5th relay onboard that can be used to power a second Ignition, Accessory, or Start wire.

The Unit uses a series of jumpers; each set of jumper pins represents a function. In order to activate any one of the three possible 2nd outputs, you must place the jumper (supplied) on one of the three sets of pins and simply connect the 14 AWG wire to the second **IGN or ACC or START** wire of the vehicle.



JUMPER SETTINGS
(REAR VIEW OF MODULE)

Caution!
Do not use more than one of the three sets of jumper pins simultaneously.
The relay output rating on this Unit is 25A max output. Defective OEM solenoid switches can sometimes draw up to 50 or 60A, causing the 30A fuse to blow. Using a digital voltmeter, check the Starter wire for amperage when vehicle is cranking.

Ignition-Controlled Door Locks

- **Ignition Lock disabled:** turns **OFF** the Ignition Lock feature.
- **Ignition Lock enabled:** locks all Doors when the key is in the **ON** position and the user presses the Brake Pedal. Similarly, when the Ignition key is turned to the **OFF** position, the Doors will unlock.
- **Ignition Lock Only:** the system will only **lock** all Doors when the Ignition Key is turned to the **IGNITION ON (RUN)** position and Brake Pedal is pressed.
- **Ignition Unlock Only:** the system will **unlock** all Doors when the Key is turned to the **OFF** position, provided the Ignition Key was in the **IGNITION ON (RUN)** position and the Brake Pedal was pressed at least once.

Table 7

Secure Lock

For vehicles where the OEM Alarm can be controlled the through the OEM **LOCK** and **UNLOCK** wires, **Secure Lock** saves the installer from connecting the **ARM** and **DISARM** wires and the **LOCK** and **UNLOCK** wires to the OEM **LOCK** and **UNLOCK** wires.

Upon receiving a remote start signal the system will unlock the Doors (disarming the OEM Alarm); 1/2 sec after the remote start, the system will **LOCK** the Doors.

Please note: most factory Alarm systems **will not rearm** while the Engine is running but **will lock** the Doors.

4 seconds after the Module shuts off (i.e.: runtime expired or pressing the **STOP** button), Secure Lock will **LOCK** (once more) all the Doors of the vehicle and REARM the OEM Alarm.

Smart Secure Lock operates as follows:

- If the Alarm is armed and the Starter Kill is armed, a remote start signal will be accompanied by an **UNLOCK** and a **DISARM** pulse preceding start-up. The system will **LOCK** and arm again once the Engine is running.
- If the Vehicle is initially unlocked, a remote start signal will start the Engine and enable the Starter Kill without unlocking or locking the Doors.

Table 8

Turbo Mode

This Option allows turbochargers to idle down: after the user leaves the vehicle, the Engine will keep running for 60 sec. and then shut down (It is a 1-minute Idle Mode).

Safe Start (Child Safety Mode)

Requires the user presses the **START** button on the Transmitter **twice within 3 seconds** in order to start the vehicle.

If the special safe start mode is selected (*swap start***):**

- To start the vehicle, press the **LOCK** and **UNLOCK** buttons simultaneously.
- Pressing the **START** button triggers **AUX2**.

START button becomes **AUX2** trigger and the **AUX2** button becomes the **START** trigger.

Table 9

Siren or Horn Chirps

The Siren can be set to any one of the following four Options:

Option 1 **Warning Chirps**: the arming and disarming of the car (**LOCK** or **UNLOCK**) will **not** cause the Siren to chirp. While the vehicle is being armed, if a Zone is open, the Siren will chirp **3 times**. If the Alarm was set off, the user is notified by **4 siren chirps** after pressing the **UNLOCK** button.

Option 2: **Full chirps** (by default): pressing the **LOCK** button will lock all Doors, arm the system and

- cause the Siren to **chirp once** if all Zones are closed.
- cause the Siren to chirp three times if a Zone is open.

Pressing the **UNLOCK** button will unlock and disarm the vehicle and:

- if no intrusion occurred, the Siren will **chirp twice**.
- if an intrusion occurred, the Siren will **chirp 4 times**.

Option 3: **Open Zone Notification**: if a Door is detected as open **10 sec. after arming**, the Horn/Siren will **sound 3 times (Also used for vehicles with Dome Light Delay)**.

Option 4: **Chirps disabled**: the Siren will not chirp under any circumstance.

Table 10

Note *Even if options 1, 3 or 4 are programmed and the user presses the* ***LOCK*** *button* ***twice****, the system will issue a confirmation.*

Vehicle Type – Gas or Diesel

In diesel mode the system will wait for up to 18 seconds for the glow plug light to go out, before cranking the engine. Note that the run time is automatically extended when diesel mode is selected.

Passive Or Active Arming

(Passive Mode by default.) The Alarm and Starter Kill can be set in:

Option 1:	**Active Mode**: the system will **not** arm automatically. Press **LOCK** to arm and **UNLOCK** to disarm the system.
Option 2:	**Passive Mode:** the system will arm itself unless remote-armed within 30 sec. Press **UNLOCK** to disarm.
Option 3:	**Passive Mode without Two-Stage Disarm:** Press **UNLOCK** to disarm.
Option 4:	**Active Mode with Disarmed Notification**.

Table 11

Disarmed Notification

This feature will notify the user when the vehicle is left disarmed after Ignition is turned off, or when the Module is disarmed after being previously armed, the opening or closing of a Door will cause the Horn or the Siren to **sound once** after 10 sec. to warn the user that the vehicle was left unprotected. Pressing **LOCK** or **UNLOCK** will cancel this timer.

Two-Stage Disarm

When the Siren is sounding, pressing **UNLOCK** will stop the siren – but without unlocking or disarming the vehicle. You can disable this feature by selecting corresponding option in the Passive or Active Function.

Shock Sense Bypass

When **AUX 3** is programmed for **Trunk with Disarm/Rearm** option, and the Trunk pin from the vehicle has been connected to the Door Pin input wire (diode isolated), it is not necessary to press on **UNLOCK** to disarm the Alarm prior to pressing the **TRUNK** button.
When the Trunk is opened by remote control, the Door Zone/"*Trunk pin"* will be ignored; the Shock Sensor will also be ignored until the Door Zone/"*Trunk pin*" closes. Monitoring will resume 5 seconds after the Door Zone (Trunk pin) is closed.

Resetting The Module

The system is equipped with a reset function that allows the installer to erase all Transmitter codes and return all programmed Options to the factory default values.

To reset the Module:

1. **FLASH** the Hood pin switch.
2. **Before the 20 seconds have passed,** Press the Valet Button 6 times or more, until the Parking Lights start to flash.
3. The Parking Lights will flash 8 times confirming the Reset.

Table 12

Events Logging

The Module will play back the last 4 Start Failure Events Codes and the last Intrusion Code via the Parking Lights and L.E.D.

Events playback

Ensure that the Hood is up and that the Ignition is **OFF**.

- Hold down the Hood Pin-switch for 4 seconds.
- Release the Pin-switch.
- **The Parking Lights will come on.**
- With the Parking Lights on, immediately push the Pin-switch 3 times.
- **The Parking Lights and L.E.D. will flash the five events stored in memory.**

The first four playback codes are **Start Failure Events**, while the last playback code is an **Intrusion Code**. There is a pause after each event code is played back.

The system will play back the most recent event first, then the second most-recent, and so on. If there are no events at all to report, the Parking Lights will give one long flash.

Start Failure Codes via Parking Lights

1 x = No Start
3 x = Hardware Reset
4 x = Brakes
5 x = No Tach cut-off
6 x = Hood
7 x = Engine Running, no Ignition detected, or Tach before Start
10 x = Alarm condition

Intrusion Codes

1 x = Power-up Reset: Battery disconnected / reconnected or dead…
2 x = Doors intrusion
3 x = Shock Sense
4 x = Hood
5 x = Panic
6 x = Ignition

Note: "x" stands for one flash of the Parking Lights

Intrusion Codes via LED light

If there has been an intrusion in the vehicle while it was locked and armed, the LED will provide an intrusion code corresponding to the type of the intrusion which took place. The LED intrusion codes are flashed in continuous loops. They are the same codes as those provided during **Events Playback**:

1 x = Power-up Reset: Battery disconnected / reconnected or dead…
2 x = Doors intrusion
3 x = Shock Sense
4 x = Hood
5 x = Panic
6 x = Ignition

Chirps

Chirps	Description
1	• **LOCK** and **ARM** the system. • **LOCK** confirmation. • Entering Mode 1 in Programming Options. • Start attempt when the Engine is already running under remote control. • Disarmed Notification
2	• **UNLOCK** and disarm. • Transmitter Programmed. • Entering Mode 2 in Programming options.
3	• **LOCK** and arm while a zone is left unprotected. • Entering Mode 3 in Programming Options. • Door zone left unprotected.
4	• **UNLOCK** and disarm: an intrusion was detected. • Entering Tach-learning Mode.
5	• Siren or Horn Chirp Timing adjustment
Constant up to 30 seconds	• Panic Mode causes the Horn/Siren to sound.
Constant up to 60 seconds	• Alarm condition generated by an intrusion, by triggering Panic Mode, or when the Module is powered up.

Diagnostics - Parking Lights Flash Rate

Flashes	Description
1	• Doors locked, Starter Kill armed. • End of Run Time. • **TRUNK** button pressed • **START** signal received by the Module. • Cold Weather Mode cancelled. • Cannot start after maximum number of attempts is reached.
2	• Run Time cancelled. • Exiting remote valet mode • Remote start attempt cancelled by remote. • Exiting ignition valet mode • Doors unlocked, Starter Kill disarmed.
3	• Entering Cold Weather Mode • Entering remote valet • Entering ignition valet
4	• +12 volts detected on the Brake line; cranking cancelled • Entering Tach Learning
5	• New Transmitter learnt • Tach learnt
6	• Remote start attempt was made with a Tach or a vacuum signal detected before cranking
8	• Unit reset: occurs when the unit is reset to factory defaults
10	• The Hood Switch line went to ground during cranking or run time
1 – pause – 2	• There was an attempt to start the vehicle while the Module was in Valet Mode.
2 – pause – 2	• There was an attempt to start the vehicle while the Module was in Home Valet Mode.
ON solid	• **Cold Weather Mode**: the Brake Pedal is being held down
ON 2 sec.	• The Hood is up and the Hood Switch line went to ground. This is step one of the Programming Mode
ON 3 sec.	• First press of the **START** button under Safe Start. • Entering Home Valet Mode
ON 4 sec.	• **LOCK** or **UNLOCK** pulse (if door pulse is configured to 4 sec.)
ON 25 sec.	• If the Hood Pin-switch has been pressed twice: the Unit went into step 1 of the Programming cycle and no Transmitter activity was detected for 20 seconds • **Or** the Unit went into step 1 of the Transmitter Code Learning procedure and no activity was detected for a few seconds. The Unit has exited the Transmitter Code Learning procedure.
Irregular	• If the Module gives irregular flashes (1 to 10 flashes followed by a pause, followed by more flashes), it is in Playback Mode. This occurs when the Hood-switch line is flashed 3 times.
Constant flashes up to 30 sec.	• Panic Mode set off.

Programming Options

Mode 1

**indicates default setting*

Function 1 – Ignition-Controlled Door locks

- **OPTION 1* Ignition Lock disabled**
- OPTION 2 Ignition lock enabled
- OPTION 3 Ignition unlock only
- OPTION 4 Ignition lock only

Function 2 – Secure Lock

- **OPTION 1* Secure Lock disabled (1-sec. disarm pulse.)**
- OPTION 2 Secure Lock enabled in smart mode.
- OPTION 3 Secure Lock disabled (0.5 Sec disarm pulse)
- OPTION 4 Secure Lock enabled in normal mode.
- OPTION 5 Standard secure lock enabled (no rearm pulse when ignition is on)

Function 3 – Door Locks Pulse Timing

- **OPTION 1* 7/10 second lock/unlock pulses.**
- OPTION 2 4 seconds lock/unlock pulses.
- OPTION 3 7/10 seconds lock pulse and two 1/4 second unlock pulses.
- OPTION 4 1/10 second lock/unlock pulses.

Function 4 – AUX 3 Programming

- **OPTION 1* Constant while the TRUNK button is pressed**
- OPTION 2 1-sec. Trunk 1 output when **TRUNK** button pressed for 3 sec. while Ignition is OFF and data output.
- OPTION 3 **TRUNK** with disarm/rearm (shock is ignored while zone 3 is opened.)
- OPTION 4 **TRUNK** 1 sec output ON/OFF

Function 5 – AUX 2 Programming

- **OPTION 1* Priority Door access (Pressing UNLOCK a 2nd time triggers AUX 2)**
  - **Car Finder enabled (pressing SHIFT and then LOCK triggers Car Finder)**
  - **The Driver's Door unlocks upon the 1st pressing of the UNLOCK button;**
  - **All Doors unlock on any subsequent pressing of the UNLOCK button.**
- OPTION 2 Toggle ON/OFF with a 30-second timeout (press **SHIFT** and then **LOCK**) Car Finder disabled.
- OPTION 3 Constant output while pressed (press **SHIFT** and then **LOCK**) Car Finder disabled.
- OPTION 4 Priority Door access on 2nd Unlock, and Car Finder enabled.
  - The Driver's door unlocks upon the 1st, 3rd, 5th … pressing of the **UNLOCK** button.
  - All Doors unlock upon the 2nd , 4th, 6th … pressing of the **UNLOCK** button.

Mode 2

**indicates default setting*

Function 1 – N/A

- OPTION 1 N/A
- **OPTION 2* N/A**
- OPTION 3 N/A

Function 2 – Safe Start

- OPTION 1 Safe Start enabled
- **OPTION 2* Safe Start disabled**
- OPTION 3 Swap Start – increased safety mode:
  To Start: press **SHIFT** and then **LOCK** buttons.
  Press the Start button to activate Aux 2.

Function 3 – Engine Run Time

- OPTION 1 Run time - 4 minute in Gas mode / 9 minutes Diesel mode.
- **OPTION 2* Run time - 15 minute in Gas mode / 20 minutes Diesel mode.**
- OPTION 3 Run time - 25 minute in Gas mode / 30 minutes Diesel mode.

Function 4 – Idle/Turbo Mode

- OPTION 1 Idle/Turbo Mode disabled
- **OPTION 2* Turbo Mode enabled**
- OPTION 3 Turbo Mode disabled

Function 5 – Engine Type and Cold Weather Mode

- OPTION 1 Diesel Engine Mode and 20-minute run time in Cold Weather Mode.
- **OPTION 2* Gasoline Engine Mode and 4-minute run time in Cold Weather Mode.**
- OPTION 3 Diesel Engine Mode and 9-minute run time in Cold Weather Mode.

Mode 3

**indicates default setting*

Function 1 – Siren Chirps

- OPTION 1 Warning Chirps only; Lock Confirmation if the Lock button is press 2nd time.
- **OPTION 2* Chirps enabled.**
- OPTION 3 Chirps enabled with Open-Zone notification.
  (Siren warning 10 sec. after arming if a door is left open)
  (Also used for vehicles with Dome Light Delay).
- OPTION 4 Chirps disabled and Lock confirmation if the Lock button is press 2nd time.

Function 2 – Passive Or Active Arming

- OPTION 1 Active Arming
- **OPTION 2* Passive Arming (30 sec.)**
- OPTION 3 Passive Arming (30 sec.) / no TWO-STAGE DISARM
- OPTION 4 Active Arming with Disarmed Notification.

Function 3 – Ignition Monitoring: Siren Mode / Horn Mode

- OPTION 1 Siren Mode: Ignition Monitoring – disabled.
- **OPTION 2* Siren Mode: Ignition Monitoring – enabled.**
- OPTION 3 Horn Mode: Ignition Monitoring – disabled.
- OPTION 4 Horn Mode: Ignition Monitoring – enabled.

Function 4 – Shock Sense / Warn Away

- OPTION 1 Shock Sense - Ignored / Warn Away – ignored
- **OPTION 2* Shock Sense - monitored / Warn Away – monitored**
- OPTION 3 Shock Sense - Monitored / Warn Away – ignored
- OPTION 4 Shock Sense - Ignored / Warn Away – monitored

Function 5 – Ignition Valet

- OPTION 1 Ignition Valet - DISABLED
- **OPTION 2* Ignition Valet - ENABLED**
- OPTION 3 Ignition Valet – ENABLED

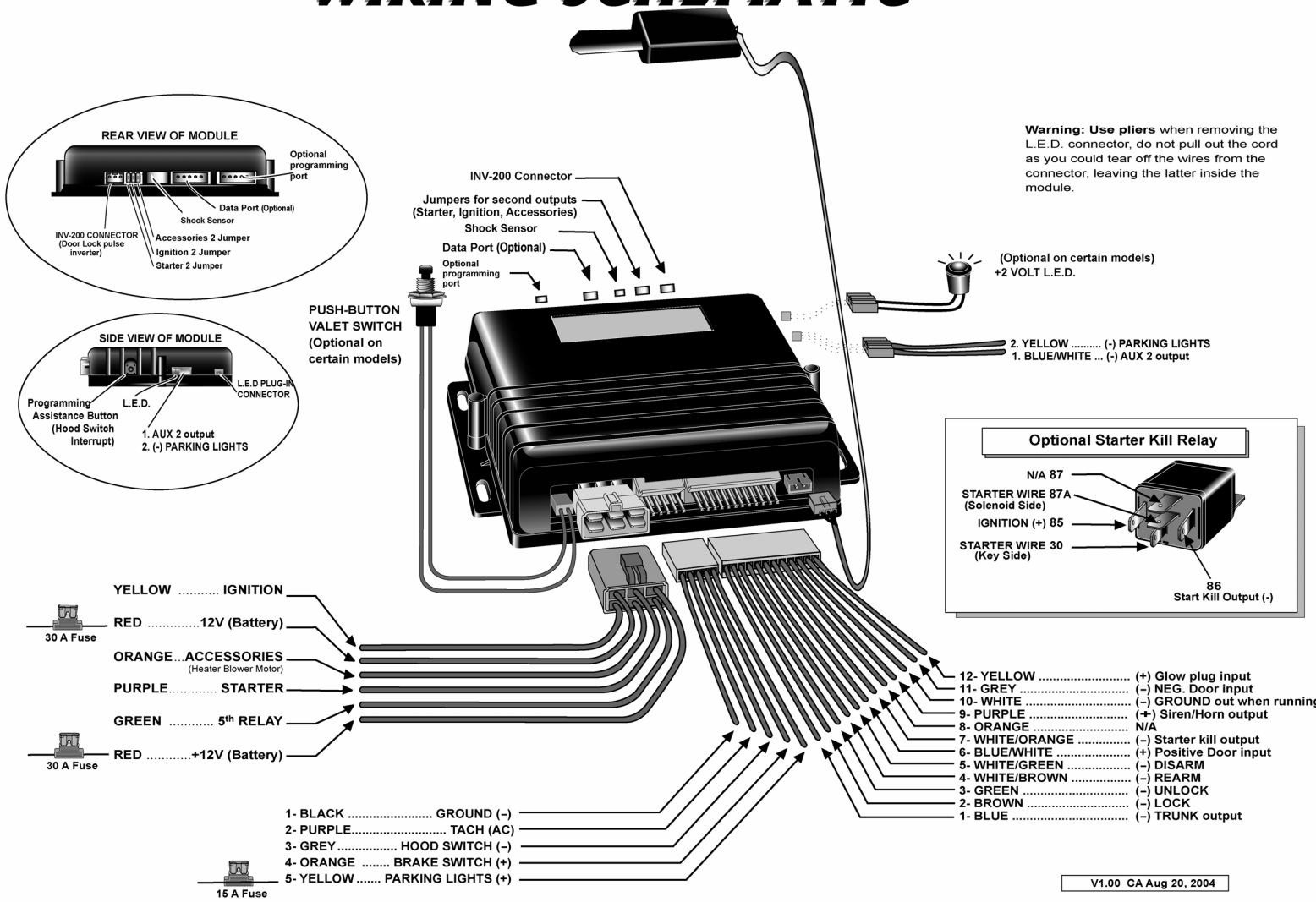
Mode 4

**indicates default setting*

Function 1 – MULTI-LEVEL FEATURES

- OPTION 1 Multi-car Features, Basic Features, Customized Features
- **OPTION 2* Basic Features, Multi-car Features, Customized Features**
- OPTION 3 Customized Features, Multi-car Features, Basic Features
- OPTION4 Basic Features, Customized Features, Multi-car Features

WIRING SCHEMATIC


REAR VIEW OF MODULE
Optional programming port
Data Port (Optional)
Shock Sensor
INV-200 CONNECTOR (Door Lock pulse inverter)
Accessories 2 Jumper
Ignition 2 Jumper
Starter 2 Jumper
SIDE VIEW OF MODULE
L.E.D PLUG-IN CONNECTOR
Programming Assistance Button (Hood Switch Interrupt)
L.E.D.
1. AUX 2 output
2. (-) PARKING LIGHTS
INV-200 Connector
Jumpers for second outputs (Starter, Ignition, Accessories)
Shock Sensor
Data Port (Optional)
Optional programming port
PUSH-BUTTON VALET SWITCH (Optional on certain models)
Warning: Use pliers when removing the L.E.D. connector, do not pull out the cord as you could tear off the wires from the connector, leaving the latter inside the module.
(Optional on certain models)
+2 VOLT L.E.D.
2. YELLOW ..... (-) PARKING LIGHTS
1. BLUE/WHITE ... (-) AUX 2 output
Optional Starter Kill Relay
N/A 87
STARTER WIRE 87A (Solenoid Side)
IGNITION (+) 85
STARTER WIRE 30 (Key Side)
86
Start Kill Output (-)
YELLOW ..... IGNITION
RED .....12V (Battery)
30 A Fuse
ORANGE...ACCESSORIES
(Heater Blower Motor)
PURPLE..... STARTER
GREEN ..... 5th RELAY
RED .....+12V (Battery)
30 A Fuse
1- BLACK ..... GROUND (–)
2- PURPLE..... TACH (AC)
3- GREY..... HOOD SWITCH (–)
4- ORANGE ..... BRAKE SWITCH (+)
5- YELLOW ..... PARKING LIGHTS (+)
15 A Fuse
12- YELLOW ..... (+) Glow plug input
11- GREY ..... (–) NEG. Door input
10- WHITE ..... (–) GROUND out when running
9- PURPLE ..... (+) Siren/Horn output
8- ORANGE ..... N/A
7- WHITE/ORANGE ..... (–) Starter kill output
6- BLUE/WHITE ..... (+) Positive Door input
5- WHITE/GREEN ..... (–) DISARM
4- WHITE/BROWN ..... (–) REARM
3- GREEN ..... (–) UNLOCK
2- BROWN ..... (–) LOCK
1- BLUE ..... (–) TRUNK output
V1.00 CA Aug 20, 2004